Gulf of Mexico Harmful Algal Bloom Bulletin

17 March 2008

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: March 11, 2008

Conditions Report

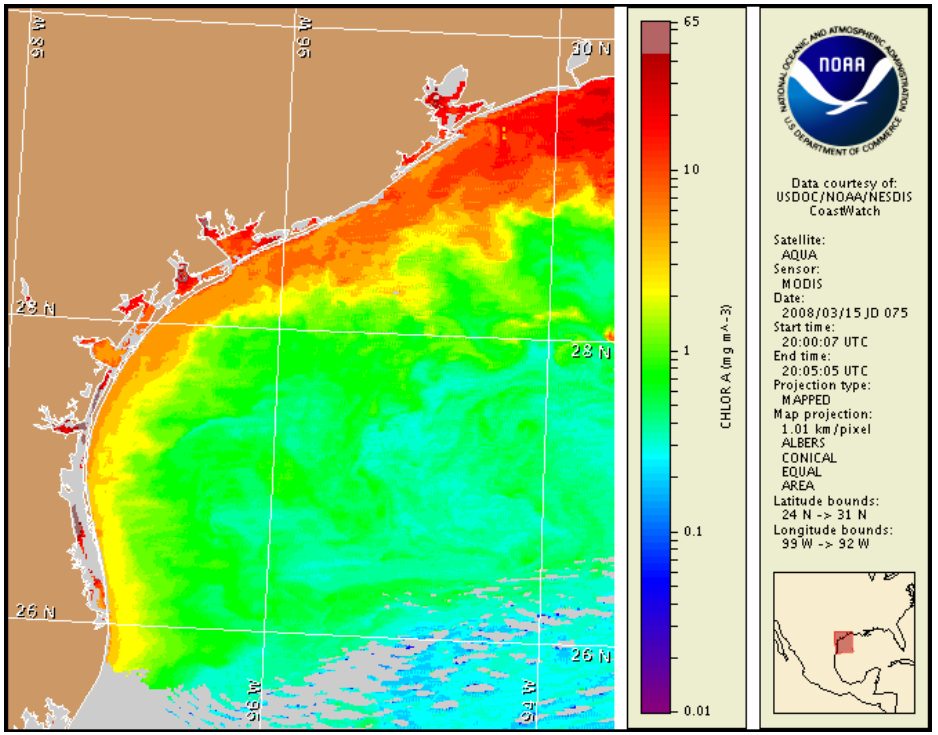
There have been confirmed reports of blooms of the harmful algae, Dinophysis, around Corpus Christi, Aransas, and Copano Bays. This is not the usual Texas "red tide" organism, (Karenia brevis) and it does not cause respiratory irritation. Shellfish beds in those bays have been closed by the state of Texas.

Analysis

Blooms of Dinophysis are rare in the US and we do not have a standard for monitoring with remote sensing. Imagery does not provide a useful reference for the blooms, but may aid in circulation patterns. Extensive resuspension is ongoing on the Texas coast, leading to high chlorophyll concentrations that are not caused by nor related to harmful algae.

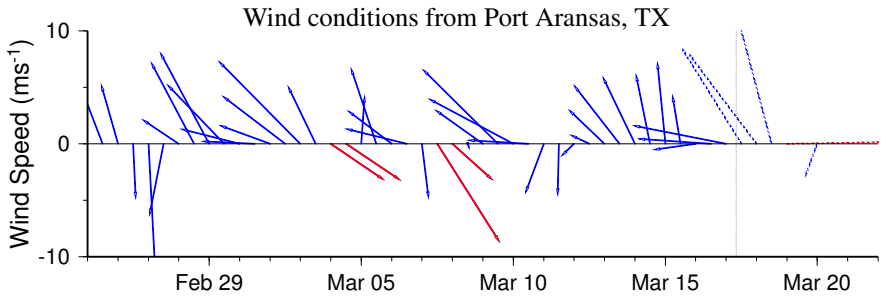
Transport forecasts presume that the cells have moved in the Gulf of Mexico. We cannot forecast transport in the bays at this time. Modeled transport indicates that the bloom could have moved along the coast from Aransas to Pass Cavallo between March 4 and March 11. Little additional northward transport has been or is expected on the Gulf coast through Wed March 19. Strong southward transport is expected along the NE Texas coast during that time. Both measured (TABS) and predicted (TGLO) currents suggest convergence of along coast flow at the coast between Aransas and Matagorda.

--Stumpf, Wynne



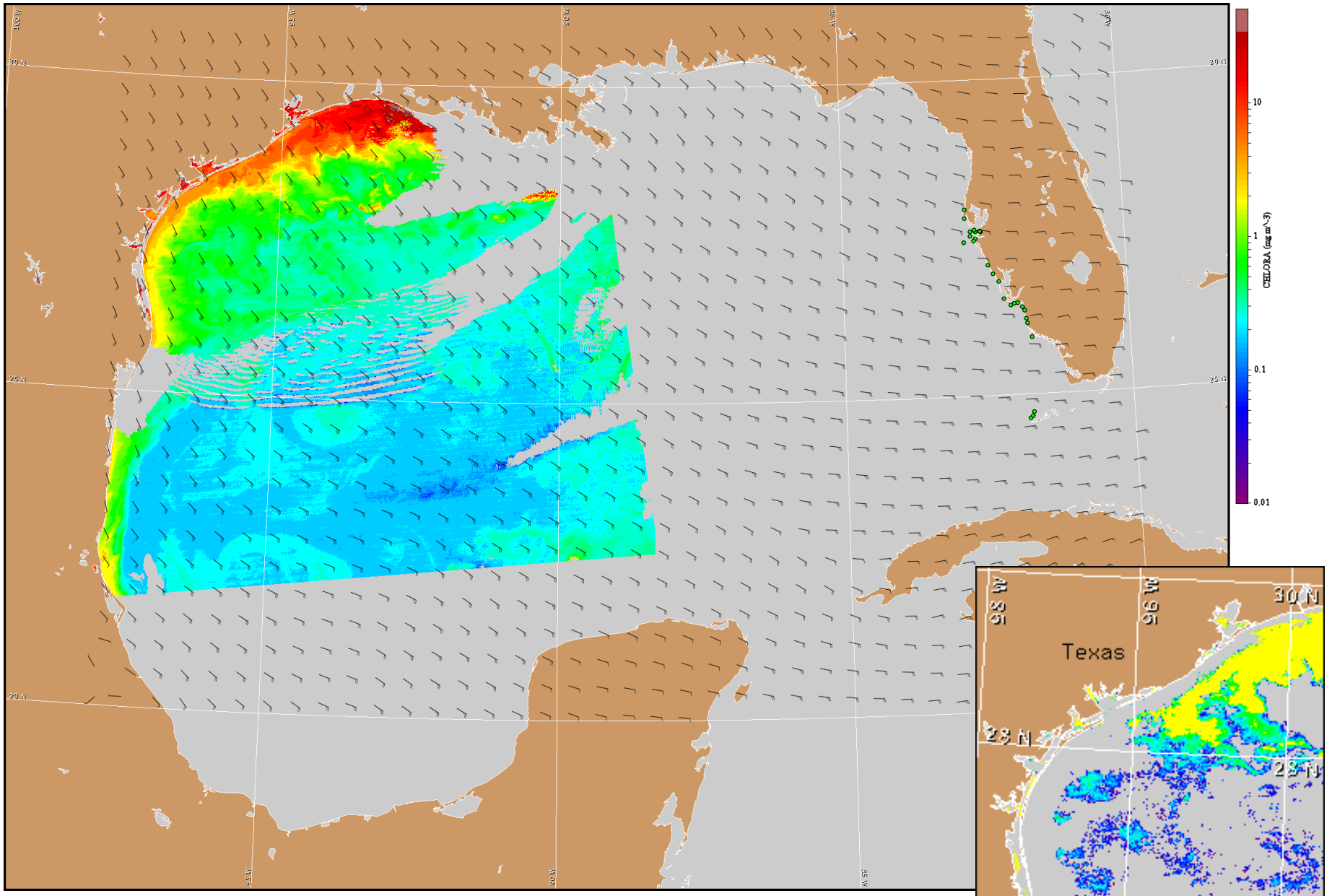
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 10 to 13 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Strong southerly winds through Tuesday should cause a setup on the Louisiana coast driving southward coastal transport. A low will cross NE Texas on Wed, causing winds to clock around (southerly to westerly to northerly), with a return to southerly winds expected.



Satellite chlorophyll image and forecast winds for March 18, 2008 06Z with Cell concentration sampling data from March 10 to 13 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).